



Express Mail No. EV 860865712 US

UNITED STATES PATENT AND TRADEMARK OFFICE  INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICATION NO:	10/522,320
	FILING DATE:	January 24, 2005
	FIRST NAMED	John L. Schenk
	ART UNIT:	1651
	EXAMINER NAME:	Leon B. Lankford
	DOCKET NO:	XY-Optimum-USNP

## I. US PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NO. & KIND CODE (if known)	PUBLICATION/ ISSUE DATE mm/dd/yyyy	PATENTEE OR APPLICANT NAME	Pages, Columns, Lines Where Relevant Passages Or Relevant Drawings Appear
	34,782	11/8/1994	Dandliker et al.	
	3,005,756	10/24/1961	VanDemark, et al.	
	3,738,759	6/12/1973	Dittrich et al.	
	3,756,459	9/4/1973	Bannister	
	3,761,187	9/25/1973	Dittrich et al.	
	3,788,744	1/29/1974	Friedman et al.	
	3,791,384	1/12/1974	Richter et al.	
	3,791,517	2/12/1974	Friedman	
	3,816,249	6/11/1974	Bhattacharya	
	3,906,929	9/23/1975	Augsburger	
	3,944,917	3/16/1976	Hogg et al.	
	4,006,360	2/1/1977	Mueller	
	4,056,324	11/1/1977	Gohde	
	4,058,732	11/15/1977	Wieder	
	4,110,804	8/29/1978	Haynes et al.	
	4,148,718	4/10/1979	Futwyler	
	4,175,662	11/27/1979	Zold	
	4,189,236	2/19/1980	Hogg et al.	
	4,225,229	9/30/1980	Gohde	
	4,263,508	4/21/1981	Leary et al.	
	4,348,107	9/7/1982	Leif	
	4,367,043	1/4/1983	Sweet et al.	
	4,408,877	10/11/1983	Lindmo et al.	
	4,492,436	1/8/1985	Bergmann	
	4,545,677	10/8/1985	Chupp	
	4,573,796	3/4/1986	Martin	
	4,585,736	4/29/1986	Dolbear et al.	
	4,609,286	9/2/1986	Sage, Jr.	
	4,629,687	12/16/1986	Schindler et al.	
	4,659,185	4/21/1987	Aughton	
	4,661,913	4/28/1987	Wu et al.	
	4,662,742	5/5/1987	Chupp	
	4,673,289	6/16/1987	Gaucher	
	4,704,891	11/10/1987	Recklenwald et al.	
	4,710,635	12/1/1987	Chupp	
	4,737,025	4/12/1988	Steen	
	4,752,131	6/21/1988	Eisenlauer et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TG/

4,765,737	8/23/1988	Harris et al.	
4,770,992	9/13/1988	den Engh et al.	
4,778,593	10/18/1988	Yamashita et al.	
4,780,406	10/25/1988	Dolbear et al.	
4,786,165	11/22/1988	Yamamoto et al.	
4,796,788	1/10/1989	Bond	
4,867,908	9/19/1989	Recktenwald et al.	
4,871,249	10/3/1989	Watson	
4,876,458	10/24/1989	Takeda et al.	
4,887,721	12/19/1989	Martin et al.	
4,915,501	4/10/1990	Steen	
4,936,465	6/26/1990	Zold	
4,954,715	9/4/1990	Zold	
4,957,363	9/18/1990	Takeda et al.	
4,989,977	2/5/1991	North, Jr.	
5,040,890	8/20/1991	North, Jr.	
5,043,591	8/27/1991	Ludlow et al.	
5,057,413	10/15/1991	Terstappen et al.	
5,072,382	12/10/1991	Kamentsky	
5,076,472	12/31/1991	Gross et al.	
5,087,295	2/11/1992	Gross et al.	
5,089,714	2/18/1992	Ludlow et al.	
5,116,125	5/26/1992	Rigler	
5,138,181	8/11/1992	Lefevre et al.	
5,142,140	8/25/1992	Yamazaki et al.	
5,142,462	8/25/1992	Kashima	
5,158,889	10/27/1992	Hirako et al.	
5,204,884	4/20/1993	Leary et al.	
5,274,240	12/28/1993	Mathies et al.	
5,275,787	1/4/1994	Yuguchi et al.	
5,316,540	5/31/1994	McMannis et al.	
5,317,162	5/31/1994	Pinsky et al.	
5,395,588	3/7/1995	North, Jr. et al.	
5,400,179	3/21/1995	Ito	
5,444,527	8/22/1995	Kosaka	
5,447,841	9/5/1995	Grey et al.	
5,457,526	10/10/1995	Kosaka	
5,464,581	11/7/1995	Van den Engh	
5,469,375	11/21/1995	Kosaka	
5,475,487	12/12/1995	Mariella, Jr. et al.	
5,480,775	1/2/1996	Ito et al.	
5,488,469	1/30/1996	Yamamoto et al.	
5,492,534	2/20/1996	Alheyde	
5,495,719	3/5/1996	Gray, Jr.	
5,547,849	8/20/1996	Baer et al.	
5,548,395	8/20/1996	Kosaka	
5,548,661	8/20/1996	Price et al.	
5,550,058	8/27/1996	Corio et al.	
5,556,764	9/17/1996	Sizto et al.	
5,559,032	9/24/1996	Pomeroy et al.	
5,579,159	11/26/1996	Ito	
5,584,982	12/17/1996	Dovich et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TG/

5,601,234	2/11/1997	Larue	
5,608,519	3/4/1997	Grouley et al.	
5,620,842	4/15/1997	Davis et al.	
5,627,037	5/6/1997	Ward et al.	
5,633,503	5/27/1997	Kosaka	
5,643,796	7/1/1997	den Engh et al.	
5,658,751	8/19/1997	Yue et al.	
5,665,315	9/9/1997	Robert et al.	
5,674,743	10/7/1997	Ulmer	
5,682,038	10/28/1997	Hoffman	
5,690,815	11/25/1997	Krasnoff et al.	
5,696,157	12/9/1997	Wang et al.	
5,701,012	12/23/1997	Ho	
5,712,807	12/27/1998	Bangham	
5,719,666	2/17/1998	Fukuda et al.	
5,719,667	2/17/1998	Miers	
5,726,009	3/10/1998	Connors et al.	
5,726,751	3/10/1998	Allendorf et al.	
5,730,941	3/24/1998	Lefevre et al.	
5,736,330	4/7/1998	Fulton	
5,736,330	4/7/1998	Fulton	
5,739,902	4/14/1998	Gjelsnes et al.	
5,745,308	4/28/1998	Spangenberg	
5,747,349	5/10/1998	den Engh et al.	
5,790,692	8/4/1998	Price et al.	
5,796,276	8/25/1998	Haugland et al.	
5,799,830	9/1/1998	Carroll et al.	
5,831,723	11/3/1998	Kubota et al.	
5,840,504	11/24/1998	Blecher	
5,844,685	12/1/1998	Gontin	
5,846,737	12/8/1998	Kang	
5,866,344	2/2/1999	Georgiou	
5,872,627	2/16/1999	Miers	
5,874,266	2/23/1999	Paisson	
5,880,474	3/9/1999	Norton et al.	
5,883,378	3/16/1999	Irish et al.	
5,893,843	4/13/1999	Rodrigues Claro	
5,909,278	6/1/1999	Deka et al.	
5,917,733	6/29/1999	Bangham	
5,919,360	7/6/1999	Contaxis, III et al.	
5,934,885	8/10/1999	Farrell et al.	
5,962,238	10/5/1999	Sizto et al.	
5,972,710	10/26/1999	Weigl et al.	
5,973,842	10/26/1999	Spangenberg	
5,990,479	11/23/1999	Weiss et al.	
5,991,028	11/23/1999	Cabib et al.	
5,996,140	12/7/1999	Dervan et al.	
5,998,212	12/7/1999	Corio et al.	
6,003,678	12/21/1999	Van den Engh	
6,042,249	3/28/2000	Spangenberg	
6,071,689	6/6/2000	Seidel et al.	
6,079,836	6/27/2000	Burr et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TG/

	6,086,574	7/11/2000	Carroll et al.	
	6,090,947	7/18/2000	Dervan et al.	
	6,097,485	8/1/2000	Lievan	
	6,111,398	8/29/2000	Graham	
	6,120,735	9/19/2000	Zborowski et al.	
	6,128,133	10/3/2000	Bergmann	
	6,130,034	10/10/2000	Aitken	
	6,132,961	10/17/2000	Gray et al.	
	6,133,995	10/17/2000	Kubota	
	6,139,800	10/31/2000	Chandler	
	6,143,535	11/7/2000	Paisson	
	6,143,901	11/7/2000	Dervan	
	6,146,837	11/14/2000	van de Winkel	
	6,309,815	10/30/2001	Tash et al.	
	6,316,234	11/13/2001	Bova	
	6,328,071	12-11-2001	Austin	
	6,368,786	4/8/2002	Saint-Ramon et al.	
	6,495,366	12/17/2002	Briggs	
	6,698,627	3/2/2004	Garcia et al.	
	6,729,369	4/4/2004	Neas et al.	
	6,752,298	6/22/2004	Garcia et al.	
	6,761,286	7/13/2004	Py et al.	
	6,761,288	7/13/2004	Garcia	
	6,767,706	7/27/2004	Quake	
	6,789,706	9/14/2004	Abergel et al.	
	6,789,759	9/14/2004	Heldt	
	6,793,387	9/21/2004	Neas et al.	
	7,015,310	3/1/2006	Remington et al.	
	7,105,355	9/12/2006	Kurabayashi et al.	
	6,193,647 B1	2/27/2001	Beebe et al.	
	6,201,628 B1	3/13/2001	Basiji et al.	
	6,207,392 B1	3/27/2001	Weiss et al.	
	6,208,411 B1	3/27/2001	Vaez-Iravani	
	6,211,477 B1	4/3/2001	Cardott et al.	
	6,214,560 B1	4/10/2001	Yguerabide et al.	
	6,221,654 B1	4/24/2001	Quake et al.	
	6,221,671 B1	4/24/2001	Groner et al.	
	6,247,323 B1	6/19/2001	Maeda	
	6,256,096 B1	7/3/2001	Johnson	
	6,256,096 B1	7/3/2001	Johnson et al.	
	6,296,810 B1	10/2/2001	Ulmer	
	6,317,511 B1	11/3/2001	Horiuchi	
	6,322,901 B1	11/27/2001	Bawendi et al.	
	6,323,632 B1	11/27/2001	Husher et al.	
	6,326,144 B1	12/4/2001	Bawendi et al.	
	6,329,158 B1	12/11/2001	Hoffman et al.	
	6,332,540 B1	12/25/2001	Paul et al.	
	6,372,506 B1	4/16/2002	Norton	
	6,384,951 B1	5/7/2002	Basiji et al.	
	6,400,453 B1	6/4/2002	Hansen	
	6,411,904 B1	5/25/2002	Chandler	
	6,416,190 B1	7/9/2002	Grier et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TG/

6,423,505 B1	7/23/2002	Davis	
6,423,551 B1	7/23/2002	Weiss et al.	
6,432,630 B1	8/13/2002	Blankenstein	
6,432,638 B2	8/13/2002	Dervan et al.	
6,452,372 B1	9/17/2002	Husher et al.	
6,454,945 B1	9/24/2002	Weigl et al.	
6,456,055 B2	9/24/2002	Shinabe et al.	
6,465,169 B2	10/15/2002	Walderich et al.	
6,473,176 B2	10/29/2002	Basiji et al.	
6,482,652 B2	11/19/2002	Furlong et al.	
6,495,333 B1	12/17/2002	Willmann et al.	
6,503,698 B1	1/7/2003	Dobrinsky et al.	
6,511,853 B1	1/28/2003	Kopf-Sill et al.	
6,514,722 B2	2/4/2003	Paisson et al.	
6,540,895 B1	4/1/2003	Spence et al.	
6,563,583 B2	5/13/2003	Ortyn et al.	
6,576,291 B2	6/10/2003	Bawendi et al.	
6,580,504 B1	6/17/2003	Ortyn et al.	
6,587,203 B2	7/1/2003	Colon	
6,589,792 B1	7/8/2003	Malachowski	
6,596,143 B1	7/22/2003	Wang et al.	
6,596,499 B2	7/22/2003	Jalink	
6,613,525 B2	9/2/2003	Nelson et al.	
6,618,143 B2	9/9/2003	Roche et al.	
6,641,708 B1	11/4/2003	Becker et al.	
6,658,357 B2	12/2/2003	Chandler	
6,664,550 B2	12/16/2003	Rader et al.	
6,674,525 B2	1/6/2004	Bardell et al.	
6,700,130 B2	3/2/2004	Fritz	
6,703,621 B2	3/9/2004	Wolleschensky	
6,706,163 B2	3/16/2004	Seul et al.	
6,707,555 B1	3/16/2004	Kusuzawa et al.	
6,713,019 B2	3/30/2004	Ozasa et al.	
6,746,873 B1	6/8/2004	Buchanan et al.	
6,753,161 B2	6/22/2004	Koller et al.	
6,780,377 B2	8/24/2004	Hall et al.	
6,813,017 B1	11/2/2004	Hoffman et al.	
6,849,394 B2	2/1/2005	Rozenboom et al.	
6,849,423 B2	2/1/2005	Mutz et al.	
6,861,265 B1	3/1/2005	Van den Engh	
6,941,005 B2	9/6/2005	Lary et al.	
7195920 B2	3/27/2007	Seidel et al	
7208265 B1	4/24/2007	Schenk	
7221453 B2	5/22/2007	Sharpe et al.	
5,017,497	5/21/1991	de Grooth	
20040107150	06/03/2000	Neas et al.	
2001/0006416 A1	7/5/2001	Johnson	
2002/0047697 A1	4/25/2002	Husher et al.	
2002/0058332 A1	5/16/2002	Quake et al.	
2002/0064809 A1	5/30/2002	Mutz et al.	
2002/0115055 A1	8/22/2002	Matta	
2002/0171827 A1	11/21/2002	Van den Engh	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TG/

2002/0182590 A1	12/2/2002	Strange et al.	
2002/0186874 A1	12/12/2002	Price et al.	
2002/0198928 A1	12/26/2002	Bukshpan et al.	
2002-0131957 A1	9/19/2002	Gavin	
2003/0048433 A1	3/13/2003	Desjonqueres	
2003/0059764 A1	3/27/2003	Ravkin et al.	
2003/0059945 A1	3/27/2003	Dzekunov et al.	
2003/0078703	4/24/2003	Potts	
2003/0096405 A1	5/22/2003	Takayama et al.	
2003/0113765 A1	6/19/2003	Dempcy et al.	
2003/0119050 A1	6/26/2003	Shai	
2003/0119206 A1	6/26/2003	Shai	
2003/0165812 A1	9/4/2003	Takayama et al.	
2003/0175917 A1	9/18/2003	Cumming	
2003/0175980 A1	9/18/2003	Hayenga et al.	
2003/0190681 A1	10/9/2003	Shai	
2004/0034879 A1	2/19/2004	Rothstein et al.	
2004/0034879 A1	2/19/2004	Rothstein et al.	
2004/0061070 A1	4/1/2004	Hansen	
2004/0061070 A1	4/1/2004	Hansen	
2004/0061853 A1	4/1/2004	Blasenheim	
20050011582 A1	1/20/2005	Haug	
20050064383 A1	3/24/2005	Bashkin et al.	
20060118167 A1	6/8/2006	Neas et al.	
20060147894 A1	7/6/2006	Sowler, David Brian	
20060263829 A1	11/15/2006	Evans et al.	
20060281176 A1	12/14/2006	Seidel et al.	
2007/0017086	5/1/2007	Evans et al.	
20070026378 A1	2/1/2007	Schenk	
20070026379 A1	2/1/2007	Seidel et al	
20070042342 A1	2/22/2007	Seidel et al.	
20070092860 A1	4/28/2007	Schenk	
20070099171A1	5/3/2007	Schenk	
20070099260A1	5/3/2007	Seidel et al.	

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TG/

## II. FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	Foreign Patent Document Code, Number, Kind Code (if known)	PUB'N DATE mm- dd-yyyy	PATENTEE OR APPLICANT NAME	TRANSLATION	
				Yes	No
	WO 0175176	10/11/2001	Quake		
	WO 9957955	11/18/1999	Chandler		
	WO 04001401	12/31/2003	Lloyd		
	WO 01/68110	9/20/2001	Oncosis		
	WO 02/19594	3/7/2002	Arizona Board of Regents, Acting on Behalf of Arizona State University		
	GB 2145112	2/3/1985	Milk Marketing Board		
	WO 00/54026	9/14/2000	Christensen, et al.		
	CA 1029833	4/18/1978	Goehde, et al.		
	CA 1 250 808	3/7/1989	Dresser, D. et al.		
	CA 2,113,957 A1	1/21/1994	Wildeman, A. et al.		
	EP 0 822 401 A2	4/2/1998	Behringer, B. et al.		
	EP 0 025 296 B1	5/15/1985	Ortho Diagnostic Systems INC.		
	EP 1 118 268 A1	7/25/2001	Artemis Pharmaceuticals		
	EP 0 026 770 B1	3/16/1983	Ernst, L.		
	EP 0 029 662 B1	2/29/1984	Ortho Diagnostic Systems INC.		
	EP 0 046 345 A2	2/24/1982	Ortho Diagnostic Systems INC.		
	EP 0 068 404 B1	1/5/1983	Becton, Dickinson and Co.		
	EP 0 158 147 A2	10/16/1985	Becton, Dickinson and Co.		
	EP 0 229 814 B1	7/29/1987	Steen, H. et al.		
	EP 0 246 604 A2	11/25/1987	Becton, Dickinson and Co.		
	EP 0 279 000 B1	7/21/1993	Ratcom, Inc		
	EP 0 288 029 B1	1/12/1994	Hitachi, LTD.		
	EP 0 289 200 B2	8/24/1994	Preikschat, F. et al.		
	EP 0 246 604 A2	11/9/1988	Preikschat, F. et al.		
	EP 0 316 171 B1	9/30/1992	Government Of The United Kingdom		
	EP 0 316 172 B1	7/29/1992	Government Of The United Kingdom		
	EP 0 316 173 A1	5/17/1989	Government Of The United Kingdom		
	EP 0 317 809 A2	5/31/1989	Becton, Dickinson and Co.		
	EP 0 360 487 B1	7/9/1997	Hitachi, LTD.		

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TG/

	EP 0 361 503 B1	11/30/1994	TOA Medical Electronics Co. LTD.		
	EP 0 361 504 B1	7/27/1994	TOA Medical Electronics Co. LTD.		
	EP 0 381 694 B1	6/1/1994	United States Department of Energy		
	EP 0 409 293 A2	1/23/1991	Becton, Dickinson and Co.		
	EP 0 412 431 B1	10/29/1997	Becton, Dickinson and Co.		
	EP 0 430 402 B1	1/27/1999	The Regents of the University Of California		
	EP 0 463 562 A1	1/2/1992	Flow Science, INC.		
	EP 0 471 758 B1	9/11/1996	United States of America		
	EP 0474 187 A2	3/11/1992	Hitachi, LTD.		
	EP 0 526 131 B1	1/21/1998	TOA Medical Electronics Co. LTD.		
	EP 0 529 666 B1	4/12/2000	Omron Corporation		
	EP 0 534 033 B1	11/28/2001	Fahim, M.		
	EP 0 545 284 B1	2/5/1997	Canon Kabushiki Kaisha Tokyo		
	EP 0 553 951 A1	8/4/1993	TOA Medical Electronics Co. LTD.		
	EP 0 555 212 B1	10/12/1994	Biophos Medical		
	EP 0 556 748 B1	10/28/1998	Canon Kabushiki Kaisha Tokyo		
	EP 0 662 124 B1	6/12/2002	Systemix, INC.		
	EP 0 696 731 A2	2/14/1996	TOA Medical Electronics Co. LTD.		
	EP 0 705 978 A2	4/10/1996	Bayer Corporation		
	EP 0 711 991 A1	5/15/1996	TOA Medical Electronics Co. LTD.		
	EP 0 736 765 A1	10/9/1996	Becton, Dickinson and Co.		
	EP 0 748 316 B1	5/8/2002	Sunkyoung Industries Co., LTD.		
	EP 0 752 133 B1	6/28/2000	Coulter Corporation		
	EP 0 822 404 A3	2/4/1998	Bayer Corporation		
	EP 0 925 494 B1	12/19/2001	Scandinavian Micro Biodevices		
	EP 0 994 342 A3	4/19/2000	Sysmex Corporation		
	EP 1 018 644 A2	7/12/2000	Bayer Corporation		
	EP 1 100 400 B1	5/19/2004	Kisfeld, A.		

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TG/



	EP 1 147 774 A1	10/24/2001	Stichting Dienst Landbouwkundig Onderzoek		
	EP 1 245 944 A3	10/2/2002	Sysmex Corporation		
	EP 1 249 502 A2	10/16/2002	Hitachi Software Engineering Co., Ltd.		
	EP 1 257 168 B1	2/2/2005	XY, Inc.		
	WO 02/23163 A1	3/21/2002	California Institute Of Technology		
	EP 1 380 304 A2	1/14/2004	Applied Research Systems ARS		
	GB 2 144 542 A	3/6/1985	Neal, L. et al.		
	GB 2 121 976 A	1/4/1984	International Remote Imaging Systems Inc.		
	GB 2 122 369 A	1/11/1984	International Remote Imaging Systems Inc.		
	GB 2 125 181 A	2/29/1984	Coulter Electronics Inc.		
	GB 2 136 561 A	9/19/1984	Coulter Corporation		
	GB 2 137 352 A	10/3/1984	Coulter Corporation		
	GB 2 153 521 A	8/21/1985	United States Department of Energy		
	GB 2 243 681 A	11/6/1991	Gaial Laboratories Ltd.		
	GB 2 360 360 A	9/19/2001	University of Bristol U.K.		
	WO 01/75161 A2	10/11 01	Iowa State University Research Foundation		
	WO 99/44035	9/2/1999	Coulter International Corp.		
	WO 02/057775 A1	7/25/2002	Cytomation, Inc.		
	WO 96/12172	4/25/1996	University of Washington U.S.		
	WO 2004/006916 A1	1/22/2004	Applied Research Systems ARS		
	WO 2004/046712 A2	6/3/2004	University of Virginia Patent Foundation U.S.		
	WO 93/10803	6/10/1993	British Technology Group LTD., G.B.		
	WO 03/ 072765 A1	9/4/2003	The Regents of the University Of Michigan U.S.		
	WO 02/060880 A1	8/8/2002	The Universite De Geneve		
	WO 02/092247 A1	11/21/2002	Cytomation, Inc.		

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TG/

	WO 02/29106 A2	4/11/2002	Califomia Institute Of Technology U.S.		
	WO 02/44319 A2	6/6/2002	Picoliter Inc. U.S.		
	WO 03/008102 A1	1/30/2003	The Regents of the University Of Michigan U.S.		
	WO 03/012403 A1	2/13/2003	Bio-Cytex		
	WO 03/016875 A2	2/27/2003	Union Biometrica, Inc. U.S.		
	WO 03/056330 A2	7/10/2003	Institut Fur Physikalische Hochtechnologie E.V.		
	WO 03/056335 A2	7/10/2003	Institut Fur Physikalische Hochtechnologie E.V.		
	WO 03/078065 A1	9/25/2003	Micronics, INC. U.S.		
	WO 03/078972 A1	9/25/2003	Micronics, INC. U.S.		
	WO 89/04471 A1	5/18/1989	Government Of The United Kingdom		
	WO 84/01265 A1	4/12/1984	Genetic Engineering, Inc. U.S.		
	WO 85/04014 A1	9/12/1985	Research Corporation, U.S.		
	WO 89/04470 A1	5/18/1989	Government Of The United Kingdom		
	WO 89/04472 A1	5/18/1998	Government Of The United Kingdom		
	WO 92/08120 A1	5/14/1992	Macquarie University		
	WO 92/17288 A1	10/15/1992	The University of Rochester, U.S.		
	WO 94/22001 A1	9/29/1994	Steen, H.		
	WO 96/04542 A1	2/15/1996	Abbott Laboratories, U.S.		
	WO 96/12173 A1	4/25/1996	University Of Washington U.S.		
	WO 96/33806 A1	10/31/1996	Systemix, U.S.		
	WO 97/29354 A1	8/14/1997	Bayer Aktiengesellschaft		
	WO 97/30338 A1	8/21/1997	Inphocyte, Inc., U.S.		
	WO 97/35189 A1	9/25/1997	University Of Washington U.S.		
	WO 97/43620 A1	11/20/1997	International Remote Imaging Systems Inc.		

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TG/

	WO 2006/015056 A2	2/9/2006	Dako-Cytomation, Denmark		
	WO 03/008937 A2	1/30/2003	The Regents of the University Of Michigan U.S.		
	WO 02/052244 A2	7/4/2002	Amer-Sham Biosciences AB		
	WO 00/12204	3/9/2000	University Of Washington U.S.		
	WO 00/36396	6/22/2000	Union Biometrica, INC., U.S.		
	WO 00/49387	8/24/2000	IDEXX Laboratories, INC., U.S.		
	WO 00/56444	9/28/2000	Torsana Biosensor		
	WO 00/70080	11/23/2000	Caliper Technologies Corp. U.S.		
	WO 01/02836 A1	1/11/2001	Becton, Dickinson and Company U.S.		
	WO 01/28700 A1	4/26/2001	Cytomation, Inc. U.S.		
	WO 01/42757 A2	6/14/2001	Oregon Health Sciences University U.S.		
	WO 01/61313 A2	8/23/2001	(MWI, Inc.) Danam Electronics		
	WO 01/68226 A2	9/20/2001	University of Bristol U.K.		
	WO 01/71348 A1	9/27/2001	The Board Of Trustees of the Leland Stanford Junior University U.S.		
	WO 02/01189 A1	1/3/2002	Gnothis Holding S.A.		
	WO 02/04666 A2	1/17/2002	Cambridge University Technical Services Limited		
	WO 02/054044 A2	7/11/2002	Picoliter Inc. U.S.		
	WO 02/077637 A1	10/3/2002	Infigen, Inc. U.S.		
	WO 02/092161 A1	11/21/2002	Bio-Phan, LLC. U.S.		
	WO 02/20850 A2	3/14/2002	Iowa State University Research Foundation U.S.		
	WO 02/21102 A2	3/14/2002	Guava Technologies, Inc. U.S.		
	WO 02/25269 A2	3/28/2002	The University of Manchester		
	WO 02/26114 A2	4/4/2002	Bitensky, M. et al.		

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TG/

	WO 98/57152 A1	12/17/1998	Guava Technologies, Inc. U.S.		
	WO 99/47906 A1	9/23/1999	Partec Partikelzahlgerate		
	WO 99/60397 A1	11/25/1999	University Of Washington U.S.		
	WO 99/61888 A2	12/2/1999	California Institute Of Technology U.S.		

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH, /TG/

### III. OTHER REFERENCES

EXAMINER INITIAL	Document
	Parallel New Zealand application number 538265, Examination Report dated 11/15/2007
	de Graaf, S.P. et al., Birth of offspring of pre-determined sex after artificial insemination of frozen-thawed, sex-sorted and re-frozen-thawed ram spermatozoa, <i>Theriogenology</i> , 67 (2007) 391-398
	O'Brien, J.K. et al., Development fo sperm sexing and associated assisted reproductive technology for sex preselection of captive bottlenose dolphins, <i>Reproduction Fertility and Development</i> , 2006, 18, 319-329
	Zhang, M. et al., In vitro fertilization with flow-sorted buffalo sperm, <i>Reproduction Fertility and Development</i> , 2005, 18(2), 283-284
	Schenk, J.L. et al., Insemination of cow elk with sexed frozen semen, 2003 <i>Theriogenology</i> 59, 514
	BD Biosciences Brochure, BD FACSCalibur Flow Cytometer, the Automated, Multicolor Flow Cytometry System, 2006
	Johnson, L. A. et al., Cryopreservation of flow cytometrically sorted boar sperm: effects on in vivo embryo development; <i>J. Anim Sci. Vol. 78, Suppl 1/J. Dairy Sci., vol. 83, Suppl 1</i> , 2000
	Lindsey, A., et al., "Hysteroscopic Insemination of Fresh and Frozen Unsexed and Sexed Equine Spermatozoa", pp. 152-153, <i>Proc. 5th Int. Symp. Equine Embryo Transfer</i> , P. 13, 2000
	Presicce, G.A., et al., First established pregnancies in mediterranean italian buffaloes ( <i>bubalus bubalis</i> ) following deposition of sexed spermatozoa near the utero tubal junction, <i>Reproduction in Domestic Animals</i> , Volume 40, Number 1, February 2005 , pp. 73-75(3)
	Dieleman, S.J., Superovulation in cattle: from understanding the biological mechanisms to genomics of the oocyte; 23 <sup>rd</sup> Annual Meeting A.E.T.E. – Alghero; Sept. 2007
	Hasler, J. F., Factors influencing the success of embryo transfer in cattle; 23 <sup>rd</sup> World Buiatrics Congress, Quebec, Canada July 2004
	Mapletoft, R. J. et al., Superovulation in perspective, <i>Bioniche Animal Health</i> , December 2002
	Bahr, G.F. et al., Considerations of volume, mass, DNA, and arrangement of mitochondria in the midpiece of bull spermatozoa, <i>Experimental Cell Research</i> 60 (1970) 338-340
	Baumber, J., et al., "The Effect of Reactive Oxygen Species on Equine Sperm Motility, Viability, Acrosomal Integrity, Mitochondrial Membrane Potential, and Membrane Lipid Peroxidation", 2000, <i>Journal of Andrology</i> , Vol.21 (6),pp.895-902
	BD LSR II Flow Cytometer, BD Biosciences Clontech Discovery labware Immunocytometry systems Pharmingen 1/28/04
	Bermudez, D. et al., The immediate effect of IR, laser radiation on rat , germ, cells, was studied by cytophotometric quantification, <i>Scisearch</i> 2001
	Sequent Biotechnologies Inc., Welcome to the Sequent Biotechnologies Inc. website., <a href="http://www.sequentbiotech.com/">http://www.sequentbiotech.com/</a> 12/6/03
	Sabuer K. et al."Effects of Angiotensin II on the Acrosome Reaction in Equine Spermatozoa" <i>Journal of Reproduction and Fertility</i> vol. 120, 2002 P. 135-142
	Brooks, D.E., Manipulation of Mammalian Gametes In Vitro, Biennial Report, Waite Agricultural Research Institute 1986 -1989
	Bruemmer, J.E. et al., "Effect of Pyruvate on the Function of Stallion Spermatozoa Stored for up to 48 Hours", <i>Journal of Animal Science</i> 2002, vol. 80*1, pp.12-18
	Catt, S.L. et al., Hoechst staining and exposure to UV laser during flow cytometric sorting does not affect the frequency of detected endogenous DNA nicks in abnormal and normal human spermatozoa, <i>Molecular Human Reproduction</i> vol.3 no.9 pp. 821-825,(1997)

	Chaudhry, P., et al., Casein Kinase II activity and polyamine-stimulated protein phosphorylation of cytosolic and plasma membrane proteins in bovine sperm, Archives of Biochemistry and Biophysics Vol.271, No.1 pp.98-106, 5/15/89
	Chen, Y. et al., Effects of sucrose, trehalose, hypotaurine, taurine, and blood serum on survival of frozen bull sperm, Cryobiology 30:423-431 (1993)
	Chapter 16 Semen processing, storage, thawing, and handling, <a href="http://nongae.gsu.ac.kr/~cspark/teaching/chap16.html">http://nongae.gsu.ac.kr/~cspark/teaching/chap16.html</a> 9/23/02
	Conover, J. et al., Pre-loading of mouse oocytes with DNA-specific fluorochrome (Hoechst 33342) permits rapid detection of sperm-oocyte fusion, Journals of Reproductive & Fertility Ltd. 82, 681-690 (1988)
	Cressman, B.E. MD, et al., Effect of sperm dose on pregnancy rate from intrauterine insemination: a retrospective analysis, Texas Medicine, 92:74-79 (1996)
	Crissman, H.A. et al., Use of DIO-C5-3 to improve hoechst 33342 uptake, resolution of DNA content, and survival of CHO cells, Experimental cell research 174: 338-396 (1988)
	Graves, C.N., et al., "Metabolism of Pyruvate by Epididymal-Like Bovine Spermatozoa", 1964 Journal of Dairy Science Vol.47 (12), pp.1407-1411
	Certified Semen Services, CSS Minimum requirements for disease control of semen produced for AI, <a href="http://www.naab-css.org/about_css/disease_control-2002.html">http://www.naab-css.org/about_css/disease_control-2002.html</a> 9/22/03
	Culling, "Handbook of Histopathological and Histochemical Techniques," 3rd Ed., Butterworths, pp.192
	De Grooth, B. et al., Simple delay monitor for droplet sorters, Cytometry 12:469-472 (1991)
	Lodge, J.R., et al., "Carbon Dioxide in Anaerobic Spermatozoan Metabolism" 1968, Journal of Dairy Science, Vol. 51(1), pp. 96-103
	Delgado, N. et al., Correlation between sperm membrane destabilization by heparin and aniline blue staining as membrane integrity index, Archives of Andrology 40:147-152 (1998)
	Denniston, D.J. et al., "Effect of Antioxidants on the Motility and Viability of Cooled Stallion Spermatozoa", Journal Reproduction Supplement 56, 2001, pp. 121-126
	De Pauw M.C. et al. Sperm Binding to Epithelial Oviduct Explants in Bulls with Different Nonreturn Rates Investigated with a new In-Vitro Model Biology of Reproduction, 2002, vol. 67 P. 1073-1079
	Donoghue, A. et al., Effects of water- and lipid-soluble antioxidants on turkey sperm viability, membrane integrity, and motility during liquid storage, Poultry Science 76:1440-1445 (1997)
	Durack, Gary; "Cell - Sorting Technology", Emerging Tools for Single-cell Analysis, Chapter 1 pgs.1-359.
	Zucker, R. et al., Utility of light scatter in the Morphological analysis of sperm, Cytometry 13:39-47 (1992)
	Ericsson, S. et al., Interrelationships among fluorometric analyses of spermatozoal function, classical semen quality parameters and the fertility of frozen-thawed bovine spermatozoal, Theriogenology 39:1009-1024 (1993)
	Ericsson, et al. "Flow Cytometric Evaluation of Cryopreserved Bovine Spermatozoa Processed Using a New Antibiotic Combination", Theriogenology, 1990, vol.33(6), pp. 1211-1220
	Cho, et al. A microfluidic device for separating motile sperm from nonmotile sperm via inter-streamline crossings,
	Ericsson, R. et al., Functional differences between sperm bearing the X- or Y- chromosome, Esteves, S. et al., Improvement in motion characteristics and acrosome status in cryopreserved human spermatozoa by swim-up processing before freezing, Human Reproduction vol.15 no.10 pp.2173-2179 (2000)
	Evenson, D. et al., Physiology and Management, Rapid determination on sperm cell concentration in bovine semen by flow cytometry, J Dairy Sci. 76: 86 - 94 (1993)

Farrell et al., "Quantification of Bull Sperm Characteristics measured by Computer-Assisted Sperm Analysis (CASA) and the Relationship of Fertility", <i>Theriogenology</i> , 1998, vol.49 (4), pp. 871-879
Fitzgerald, D., Cell sorting: An enriching Experience, <i>The Scientist</i> 7/23/01
Foote, R., The history of artificial insemination: Selected notes and notables, <i>American Society of Animal Science</i> (2002)
Foote, R., Functional differences between sperm bearing the X- or Y- chromosome
Garner, D., Past, Present and future perspectives on sexing sperm, CSAS Symposium SCSA: 67-78.
Zhang, M. et al., Development of bovine embryos after in vitro fertilization of oocytes with flow cytometrically sorted, stained and unsorted sperm from different bulls, Abstract: <i>Theriogenology</i> vol. 60 Issue 9 pp 1657-1663, 12/2003
Johnson, L. et al., Sex preselection in mammals by DNA: A method for flow separation of X and Y Spermatozoa in humans,
Johnson, L. et al., Recent advances in sex preselection of cattle: Flow cytometric sorting of X-&Y-chromosome bearing sperm based on DNA to produce progeny, <i>Theriogenology</i> 41:51-56 (1994)
Ashwood-Smith, M., Debate Human sperm sex selection, <i>Human Reproduction</i> vol.9 no.5 pp.757-759 (1994)
Pinkel, D. et al., Flow cytometry of mammalian sperm progress in DNA and morphology measurement, <i>The Journal of Histochemical and Cytochemistry</i> Vol.27 No.1 pp. 353-358 (1979)
Fugger, E. et al., Birth of normal daughters after MicroSort sperm separation and intrauterine insemination, in-vitro fertilization, or intracytoplasmic sperm injection, <a href="http://www.microsort.net/HumRepro.htm">http://www.microsort.net/HumRepro.htm</a> 3/19/03
Johnson, L. et al., Flow sorting of X and Y Chromosome-bearing Mammalian sperm: Activation and pronuclear development of sorted bull, boar, and ram sperm microinjected into hamster oocytes, <i>Gamete Research</i> 21:335-343 (1988)
Salisbury, G.W., et al., "Reversal by Metabolic Regulators of CO2-induced Inhibition of Mammalian Spermatozoa, 1959, <i>Proc Soc Exp Biology Med</i> , Vol. 101 (1) pp.187-189
Centola, G. et al., Cryopreservation of human semen. Comparison of cryopreservatives, sources of variability, and prediction of post-thaw survival. PMID: 1601749 May-Jun 1992
Bencic, D.C., et al., "Carbon Dioxide Reversibly Inhibits Sperm Motility and Fertilizing Ability in Steelhead ( <i>Oncorhynchus mykiss</i> )" 2000, <i>Fish Physiology and Biochemistry</i> , vol. 23(4), pp 275-281
Boatman, D.E. et al., "Bicarbonate Carbon Dioxide Regulation of Sperm Capacitation Hyperactivated Motility and Acrosome Reactions", 1991, <i>Biology of Reproduction</i> vol. 44(5), pp. 806-813
Garcia, M.A. et al., "Development of a Buffer System for Dialysis of Bovine Spermatozoa Before Freezing III. Effect of Different Inorganic and Organic Salts on Fresh and Frozen-Thawed Semen", 1989, <i>Theriogenology</i> , vol. 31(5), pp. 1039-1048
Courtens, J. et al., Numerical simulation for freezing and thawing mammalian spermatozoa. Evaluation of cell injuries at different depths in bags or straws during all steps of the technique,
Eiman, M. et al., Trehalose-enhanced fluidity of the goat sperm membrane and its protection during freezing, <i>Biology of Reproduction</i> 69: 1245-1250 (2003)
Foote, R. et al., Physiology and Management, Fertility of bull spermatozoa frozen in whole milk extender with trehalose, taurine, or blood serum, <i>J. Dairy Sci.</i> 76:1908-1913 (1993)
Johnson, L. et al., Storage of bull semen, <i>Animal Reproduction Science</i> 62: 143-172 (2000)
Johnson, L. et al., Erratum to "Storage of bull semen", <i>Animal Reproduction Science</i> 62: 143-172 (2000)

McNutt, T. et al., Electrophoretic gel analysis of Hoechst 33342 stained and flow cytometrically sorted bovine sperm membrane proteins, <i>Reprod. Dom Anim.</i> 31: 703-709 (1996)
Van der Werf, Julius, An overview of animal breeding programs; Animal Breeding Use of New Technologies (This is a Post Graduate Foundation Publication)
Best, T. P. et al. "Nuclear Localization of Pyrrole-Imidazole Polyamide-Flourescein Conjugates in Cell Culture", <i>PNAS</i> , 2003, Vol.100(21), pp. 12063 - 12068
Gygi, M.P., et al. "Use of Fluorescent Sequence-Specific Polyamides to Discriminate Human Chromosomes by Microscopy and Flow Cytometry", <i>Nuci Acids Res.</i> 2002, vol.30(13), pp.2790 - 2799
Young, L. et al., Prolonged feeding of low levels of zearalenone to young boars, BD Biosciences, BD AccuDrop Potion, <a href="http://www.bdbiosciences.com">www.bdbiosciences.com</a> , 9/2002
Agarwal, A. et al., Filtration of spermatozoa through L4 membrane: a new method, <i>Fertility and Sterility</i> , Vol. 66, No.6, 12/1991
Anzar, M. et al., Optimizing and Quantifying fusion of liposomes to mammalian sperm using resonance energy transfer and flow cytometric methods, <i>Cytometry</i> 49:22-27 (2002)
Anzar, M. et al., Sperm Apoptosis in fresh and cryopreserved bull semen detected by flow cytometry and it's relationship with fertility, <i>Biology of Reproduction</i> 66: 354-360 (2002)
Arav, A. et al., New trends in gamete's cryopreservation, <i>Molecular and Cellular Endocrinology</i> 187:77-81 (2002)
Arndt-Jovin et al., "Analysis and Sorting of Living Cells According to Deoxyribonucleic Acid Content", <i>Journal Histochem. And Cytochem.</i> , 1977, Vol 25(7), pp. 585-589
Arts, E. et al., Evidence for the existence of lipid-diffusion barriers in the equatorial segment of human spermatozoa, <i>Boichem J</i> 384:211-218 (1994)
Garner, D. et al., Spermatozoa and Seminal Plasma, <i>Reproduction in farm animals</i> 7th edition, Gaddella B. et al., Dynamics in the membran organization of the mammalian sperm cell and functionality in fertilization, <i>Vet Quart.</i> 21:142-146 (1999)
Garner, D. et al., Chromatin stability in sex-sorted sperm, VII International Congress of Andrology,
Garner, D. et al., Morphological and ultrastructural Characterization of mammalian spermatozoa processed for flow cytometric DNA analyses, <i>Gamete Research</i> 10:339-351 (1984)
Garner, D., et al., Effect of hoechst 33342 staining and laser illumination on the viability of sex-sorted bovine sperm, <i>Theriogenology</i> , vol.57 No.1, 1-810 (2002)
Garner, D. et al., Assessment of spermatozoal function using dual fluorescent staining and flow cytometric analyses, <i>Biology of Reproduction</i> 34:, 127-138 (1986)
Gebhard D., Sorting Viability....one more time, <a href="http://www.cyto.purdue.edu/hmarchiv/1998/2263.htm">http://www.cyto.purdue.edu/hmarchiv/1998/2263.htm</a> 2/14/04
Givan, A., <i>Flow Cytometry First Principles</i> , (1992)
Gledhill, B. et al., Identifying and separating X- and Y- Chromosome-bearing mammalian sperm by flow cytometry, <i>Lawrence Livermore National Laboratory</i> , 2/8/84
Gledhill, B. et al., Identifying X- and Y- chromosome- bearing sperm by DNA content: Retrospective perspectives and prospective opinions'
Gledhill, B. et al., Flow microfluorimetric analysis of sperm DNA content: Effect of cell shape on the fluorescence distribution, <i>J. Cell Physiol.</i> 87: 367-378
Gledhill, B. et al., Flow cytometry and sorting of sperm and male germ cells, <i>Flow Cytometry and sorting</i> , second edition, pp. 531-551 (1990)
Gordon et al., " Genetic Transformation of Mouse Embryos by Microinjection of Purified DNA", <i>Proc. Natl Acad. Sci.</i> , 1980, vol. 77 (12), pp.7380-7384
Graham, J. et al., Analysis of sperm cell viability, Acrosomal integrity, and Mitochondrial function using flow cytometry, <i>Biology of Reproduction</i> 43: 55-64 (1990)



Graham, J. et al., Effect of some Zwitter Ion buffers on freezing and storage of spermatozoa I, <i>Bull. J. Dairy Sci</i> 55: 372-378 ( 1992)
Grogan, W. et al., DNA Analysis and sorting of viable mouse testis cells, <i>The Journal of Histochemistry and Cytochemistry</i> , vol. 29 no.6 pp.738-746, (1981)
Guthrie, et al., "Flow Cytometric Sperm Sorting: Effects of Varying laser Power on Embryo Development in Swine", <i>Mol. Reprod. And Develop.</i> , 2002, vol. 61 (1), pp.87-92
Hacker-Klom, U.B., et al., Effect of doxorubicin and 4'-epi-doxorubicin on mouse spermatogenesis. <i>Mutation Research International Journal on Mutagenesis</i> vol. 159, pp 39-46. 1986.
Hargrove, T. et al., <i>Special Techniques, Part B Cryopreservation, Chapter 11B</i>
Hasler, J., Symposium: Reproductive Technology and Genetic improvement. <i>J. Dairy Sci.</i> 75:2857-2879 (1992)
Held, A. et al., Quasi- CW Solid- state lasers Expand their reach, <i>Photonics Spectra</i> , 12/2002
Hinkley, R. et al., Rapid visual detection of sperm-egg fusion using the DNA-Specific Fluorochrome Hoechst 33342, <i>Developmental Biology</i> 118: 148-154 (1986)
Januskauskas, A. et al., Assessment of sperm quality through Fluorometry and sperm chromatin structure assay in relation to field fertility of frozen-thawed semen from Swedish AI bulls, <i>Theriogenology</i> 55: 947-961 (2001)
Janendran, R. et al., Effect of glycerol and cryopreservation on oocyte penetration by human spermatozoa. PMID: 4025843, 7/6/06
Johnson, L., A flow cytometric/ sorting method for sexing mammalian sperm validated by DNA analysis and live births, <i>Cytometry</i> , page 42 of supplement , 9/4/1990
Johnson, L., Flow sorting of intact X & Y chromosome-bearing mammalian spermatozoa, <i>The Journal of the Society for Analytical Cytology Cytometry</i> , (1988)
Zhang, M. et al., Development of bovine embryos after in vitro fertilization of oocytes with a flow cytometrically sorted, stained and unsorted sperm from different bulls, <i>Theriogenology</i> 60: 1657-1663 (2003)
Jones, R. et al., Effect of Osmolality and Phosphate, "Tris", "Tes", "Mes", and "Herpes" Hydrogen ion buffers on the motility of bull spermatozoa stored at 37 or 5°C, <i>Aust. J. Biol. Sci.</i> 25:1047-1055 (1972)
Jones, R., Plasma membrane structures and remodelling during sperm maturation in the epididymis, <i>Journal of Reproduction and Fertility</i> (1998)
Gerrits, Roger J. Application of Biotechnology to Animal Production US Dept. of Agriculture, Beltsville Maryland.
Johnson, L., Separation of X and Y Chromosome-bearing mammalian sperm by DNA content cytometric analysis and sorting, US Department of Agriculture,
Johnson, M., The Macromolecular Organization of membranes and its bearing on events leading up to Fertilization, <i>Journal of Reproduction and Fertility</i> (1975)
Johnson, L., Verified Sex Pre-Selection in Farm Animals,
Johnson, L., Progress towards achieving sex preselection in farm animals, USDA Agricultural Research Service, (1989)
Kachel, V. et al., Uniform Lateral Orientation, caused by flow forces, of flat particles in flow-through systems, <i>The Journal of Histochemistry and Cytochemistry</i> , vol.25 No.7 pp.774-780 (1977)
Keeler, K. et al., Flow microfluorometric analysis of living spermatozoa stained with Hoechst 33342, <i>J. Reprod. Fert.</i> 68:205-212 (1983)
Keij, J. et al., High speed Photodamage cell sorting: An evaluation of the Zapper Prototype, <i>Methods in cell Biology</i> Vol. 42, (1994)
Kirchoff, C. et al., The Molecular biology of the sperm surface: Post-Testicular Membrane Remodelling, <i>The Fate of the Male Germ Cell</i> , (1997)
Krueger, C. et al., Low dose Insemination in synchronized gilts, <i>Theriogenology</i> 52: 1363-1373 (1999)

	Lahdetie,J.,Induction and survival of micronuclei in rat spermatids. Comparison of two meiotic micronucleus techniques using cyclophosphamide, <i>Mutation Research</i> , 203:47-53 (1988)
	Laser Innovations - Applications, <a href="http://www.laserinnovations.com/488nm.htm">http://www.laserinnovations.com/488nm.htm</a> 2/2/04
	Libbus, B. et al.,Incidence of chromosome aberrations in mammalian sperm stained with Hoechst 33342 and UV-laser irradiated during flow sorting, <i>Mutation Research</i> , 182: 265 -274 (1987)
	Loken, M., Separation of viable T and B lymphocytes using a cytochemical stain, Hoechst 33342, <i>The Journal of Histochemistry and Cytochemistry</i> ,vol.28, no.1, pp.36-39 (1980)
	Lucas, J. et al., Orientation measurments of microsphere doublets and metaphase chromosomes in flow, <i>Cytometry</i> 7:575-581 (1986)
	Luttmer, S. et al.,Examination of living and fixed gametes and early embryos stained with supravital fluorochromes (Hoechst 33342 and 3,3'-dihexyloxacarcocyanine iodide), <i>Gamete Research</i> 15:267-283 (1986)
	Masiki, J. et al., Effect of bull seminal plasma on the membrane characteristics of boarepididymal spermatozoa,
	Maxwell, W. et al.,Physiology of spermatozoa at high dilution rates:The influence of seminal plasma, <i>Theriogenology</i> 52: 1353-1362 (1999)
	Mazur, P., The role of Intracellular freezing in the death of cells cooled at supraoptimal rates, <i>Cryobiology</i> 14:251-272 (1977)
	McSweeney,K. et al., Abstract: Insemination of lactating holstein cows with sexed frozen/thawed sperm, <a href="http://www.cvmbs.colostate.edu/physio/abstract/ges12.html">http://www.cvmbs.colostate.edu/physio/abstract/ges12.html</a> 3/16/04
	Medeiros, C. et al., Current status of sperm cryopreservation: Why isn't it better? <i>Theriogenology</i> 57: 327-344 (2002)
	Meistrich, M., Potential and limitations of physical methods for separation of sperm bearing an X- or Y- chromosome,
	Meistrich, M. et al., "Cytogenetic" studies of spermatids of mice carrying Cattanach's translocation by flow cytometry, <i>Chromosoma</i> 74:141-151 (1979)
	Morrell, J. et al., Offspring from inseminations with mammalian sperm stained with Hoechst 33342, either with or without flow cytometry, <i>Mutation Research</i> 224:177-183 (1989)
	Morrell et al., "Sexing of Sperm by Flow Cytometry", <i>The Veterinary Record</i> , 1988, pp.322-324.
	Morrier, A. et al., Glycerol addition and conservation of fresh and crypreserved ram spermatozoa, <i>Canadian Journal of AnimalScience</i> , 9/2002 <a href="http://pubs.nrc-cnrc.gc.ca/aic-journals/2002ab/cjas02/sep02/cjas01-045.html">http://pubs.nrc-cnrc.gc.ca/aic-journals/2002ab/cjas02/sep02/cjas01-045.html</a>
	Moruzzi, J., Selecting a mammalian species for the separation of X- and Y- chromosome-bearing spermatozoa, <i>J. Reprod. Fert.</i> 57:319-323 (1979)
	Murthi S. et al., Improved data acquisition system for digital flow cytometry, (2002)
	Stadt, T., MEMS-based Cell Sorter Speeds Clinical Studies, <i>R&amp; D Magazine</i> , Dec.2003: pp.36-37 as currently presented on and printed from <a href="http://www.rdmag.com">http://www.rdmag.com</a> 2 pgs.
	Gwo-Bin, L. et al., Multi-cell-line micro flow cytometers with buried SU-8/SOG Optical waveguides, 2/2002
	Shapiro, H. M. et al., Multistation Multiparameter Flow Cytometry: Some Influences of Instrumental Factors on System Performance, 1983,pp. 11-19,4,Allan R. Liss, Inc.
	OcanaQuero, J. et al., Biological effects of helium-neon irradiation on acrosome reaction in bull, <i>Scisearch Journal of Photochemistry and Photobiology</i> , Vol. 40 No. 3, pp. 294-298 (1997)
	Pangawkar, G. et al., Physical and biochemical characteristics of semen in relation to fertility of Holstein-Friesian bulls, <i>Indian vet. Med.J.</i> vol.13: 21-26 (1989)
	Papa, S. et al., Chromatin organization in Isolated nuclei: Flow cytometric characterization employing forward and perpendicular light scatter, <i>Cell Biochemistry and Function</i> Vol. 6: 31-38 (1988)

Parks, J. et al., Lipids of plasma membrane and outer acrosomal membrane from bovine spermatozoa, <i>Biology of Reproduction</i> 37:1249 -1258 (1987)
Parks, J. Processing and handling bull semen for artificial insemination - Don't add insult to injury!, Department of Animal Science Cornell University
Partec, Taking flow cytometry to the next generation, Catalogue 2001 - 2002
Perez-Pe, R. et al., Semen plasma proteins prevent cold shock membrane damage to ram spermatozoa, <i>Theriogenology</i> 56 (3) : 425-434, 8/1/2001, PMID: 11516122 <a href="http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?CMD=search&amp;DB=pubmed">http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?CMD=search&amp;DB=pubmed</a>
Peter, A. et al., Fractionation of bovine spermatozoa for sex selection: A rapid immunomagnetic technique to remove spermatozoa that contain the H-Y antigen, <i>Theriogenology</i> 40:1177- 1185 (1993)
Petersen, Timothy W., et al, Stability of the Breakoff Point in a High-Speed Cell Sorter The Journal of the international society for Analytical Cytology, Vol.56A Num.2, 12/2003
Pinkel Dan, Flow Cytometry and Sorting Analytical Chemistry, 3/1982 vol. 54 No.3
Pinkel Dan, Cytometric Analysis of Mammalian Sperm for Induced Morphologic and DNA Content Errors; Biological Dosimetry (Cytometric Approaches to Mammalian Systems) 1984.
Pinkel, D. et al; Radiation-Induced DNA Content Variability in Mouse Sperm. Radiation Research An International Journal, Vol.95, Num.3, 9/1983
Piumi, F. et al., Specific cytogenetic labeling of bovine spermatozoa bearing X or Y chromosomes using fluorescent in situ hybridization (FISH), <i>Genet. Sel. Vol. 33: 89-98 (2001)</i>
Polge, C., Low-temperature storage of mammalian spermatozoa, Unit of Reproductive Physiology and Biochemistry, Cambridge
Edited by Bell-Prince, C., NFCR Newsletter, <a href="http://www.ls.lanl.gov/NFCR/newsletter-Oc98/oct98.html">http://www.ls.lanl.gov/NFCR/newsletter-Oc98/oct98.html</a> 1/6/04
Rasul, Z. et al., Changes in motion characteristics, plasma membrane integrity, and acrosome morphology during cryopreservation of buffalo spermatozoa, <i>Journal of Andrology</i> , Vol.22 Num.2, 3-4/2001
Rees, William A., et al,Betaine Can Eliminate the Base Pair Composition Dependence of DNA Melting; <i>Biochemistry</i> 1993, 32, pgs. 137-144.
Rens, W. et al.,An X-Y paint set and sperm FISH protocol that can be used for validation of cattle sperm separation procedures, <i>Journals of Reproduction and Fertility</i> , 121: 541-546 (2001)
Reyes, C. et al., Characterization of Secretory Proteins from cultured Cauda Epididymal Cells that significantly sustain bovine sperm motility, <i>Molecular Reproduction and Development</i> 63: 500-509 (2002)
Rippel,N. et al., Transcervical insemination: Effects of variation in total sperm number/dose on fertility, 83rd Annual Fall Conference for Veterinarians, 10/2002
Rizzo, W. et al.,Liposome-mediated transfer of simian virus 40 DNA and minichromosome into mammalian cells, <i>J. Gen. Virol</i> 64:911-919 (1983)
Ruch, F., Determination of DNA content by microfluorometry, <i>Introduction to Quantitative Cytochemistry</i> , pp.281-294 (1966)
Saacke, R. et al., Semen Quality test and their relationship to fertility, 4th National Association of Animal Breeders, (1972)
Salisbury, G.W.,et al."Preservation of Bovine Spermatozoa in Yolk-Citrate Diluent and Field Results from its Use", <i>Journal of Dairy Science</i> , 1941, vol.24(11),pp.905-910
Schroter, S. et al., The glycocalyx of the sperm surface, <i>Human Reproduction Update: Vol.5, Num.4, pp.302-313 (1999)</i>
Schuster, T. et al., Isolation of motile spermatozoa from semen samples using microfluidics, <i>Reproductive BioMedicine Online</i> , Vol.7 Num.1 75-81, <a href="http://www.rbmonline.com/Article/847">www.rbmonline.com/Article/847</a> , 4/16/03

Seidel, George E. Jr. "What about sexed semen?" Farm Magazine, 5/10/01	Hoard's Dairyman, The National Dairy
Sexing Technologies, Welcome to sexing Technologies, <a href="http://www.sexingtechnologies.com/12/11/03">http://www.sexingtechnologies.com/12/11/03</a>	
Shapiro, Howard M. M.D., Building Flow Cytometers Chapter 9. Practical Flow Cytometry, second edition, Property of Washington University Medical Library.	
Sharp, J. et al., Radially symmetric excitation and collection optics for flow cytometric sorting of aspherical cells, Cytometry, 29:363-370 (1997)	
Shapiro, H., Re: cheap laser idea??, <a href="http://www.cyto.purdue.edu/hmarchiv/1998/1015.htm">http://www.cyto.purdue.edu/hmarchiv/1998/1015.htm</a> 2/3/04	
Smith, P. et al., Characteristics of a Novel Deep Red/ Infrared Fluorescent Cell-Permeant DNA Probe, DRAQ5, in Intact human Cells Analyzed by Flow Cytometry, Confocal and Multiphoton Microscopy, Cytometry 40:280-291 (2000)	
Stanger, J. et al., The Relationship between motility and the FITC-BSA binding Properties of Mouse epididymal spermatozoa, The Journal of Experimental Zoology 227: 323- 327 (1983)	
Stanic, P. et al., Comparison of protective media and freezing techniques for cryopreservation of human semen, <a href="http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?CMD=search&amp;DB=pubmed">http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?CMD=search&amp;DB=pubmed</a> , 7/11/2000	
Stewart, R., Georgia Beef Challenge, Livestock Newsletter 1-2/2002	
Takacs, T. et al., Flow Cytometric determination of the sperm cell number in diluted bull semen samples by DNA staining method, Acta Biochim. Biophys. Hung. Vol. 22 Num. 1, pp. 45-57 (1987)	
Thurston, L. et al., Identification of Amplified restriction fragment length polymorphism markers linked to genes controlling boar sperm viability following cryopreservation, Biology Of Reproduction 66: 545-554 (2002)	
Tone, S. et al., A method of vital staining of mouse eggs using Hoechst dye, Department of Developmental Biology (1986)	
Tubman, L. et al., Abstract: Normality of calves resulting from sexed sperm, <a href="http://www.cvmbs.colostate.edu/bms/abstract/ges12.html">http://www.cvmbs.colostate.edu/bms/abstract/ges12.html</a> 3/16/04	
Tucker, K. et al., Sperm separation techniques: Comparison of gradient products, Proceedings 2nd International workshop for Embryologists: Troubleshooting activities in the ART lab. (2002)	
Van Dilla, M. et al., Measurement of Mammalian Sperm Deoxyribonucleic acid by Flow Cytometry, The journal of Histochemistry and Cytochemistry Vol. 25 Num. 7 pp. 763-773 (1977)	
Vazquez, J. et al., Nonsurgical Uterotubal Insemination in the Mare, Reproduction: Mare Vol. 44 (1998)	
Vishwanath, R. et al., Storage of bovine semen in liquid and frozen state, Animal Reproduction Science 62: 23 - 53 (2000)	
Washburn, S., Sex-Sorted Semen; Still several steps short of sensational, <a href="http://www.cals.ncsu.edu/an_sci/extension/animal/news/april96/april1965.html">http://www.cals.ncsu.edu/an_sci/extension/animal/news/april96/april1965.html</a> 3/16/04	
Welch, G. et al., Sex preselection: Laboratory Validation of the sperm sex ratio of Flow sorted X- and Y- sperm by sort reanalysis for DNA, Theriogenology 52:1343-1352 (1999)	
Welch, G. et al., Fluidic and optical modification to a facs IV for flow sorting of X&Y Chromosomes bearing sperm based on DNA, International Society for Analytical Cytology (1994)	
Wiltshire, M. et al., A Novel Deep Red/ Low infrared fluorescent flow cytometric probe DRAQ5NO, For the Discrimination of intact nucleated cells in apoptotic cell populations, Cytometry 39: 217-223 (2000)	
Woelders, H. et al., Effects of Trehalose and Sucrose, Osmolality of the freezing medium, and cooling Rate on Viability and intactness of bull sperm after freezing and thawing, Cryobiology 35: 93-105 (1997)	

	Wolf, D., Lipid domains in sperm plasma membranes, Molecular Membrane Biology 12: 101-104 (1995)
	Wolf, D.et al., Changes in sperm plasma membrane lipid diffusibility after hyperactivation during In vitro capacitation in the mouse, The Journal of Cell Biology, Vol.102: 1372-1377(1986)
	Wolf, D.et al., Diffusion and regionalization in membranes of maturing ram spermatozoa, The Journal of Cell Biology, Vol.98:1678-1684 (1984)
	XY Files, Issue 1 6/1999
	X Y, Inc. , Sex selection Procedure, <a href="http://www.xyinc.com/sex_select.html">http://www.xyinc.com/sex_select.html</a> , 2/21/03
	XY Files, Issue 4 8/2000
	XY Files, Issue 2 10/1999
	XY Files, Issue 3 3/2000
	XY Files, Issue 5 3/2001
	XY Files, Issue 6 3/2002

/Tiffany Gough/

06/20/2008

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /TG/